



## Process for multi-layer coating

**Description of Technology:** The invention relates to a process for the production of a two-layer electrodeposition coating on three-dimensional electrically conductive objects.

### Patent Listing:

1. **US Patent No. 6,508,922**, Issued January 21, 2003, "Process for multi-layer coating"  
<http://patft.uspto.gov/netacgi/nph-Parser?Sect2=PTO1&Sect2=HITOFF&p=1&u=%2Fnetacgi%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&d=PALL&RefSrch=yes&Query=PN%2F6508922>

**Market Potential:** The production of two-layer electrodeposition coatings is known in the prior art. For example, multi-layer coatings composed of a two-layer electrodeposition coating which is overcoated with a clear coat or a base coat/clear coat layer are known from U.S. Pat. Nos. 5,908,667 and 5,882,734.

In the conventional production of two-layer electrodeposition coatings, an electrodeposition coat primer layer is initially deposited from an electrodeposition coating agent containing electrically conductive constituents on a metal substrate. After the electrodeposition coating layer has been cured by stoving (baking), the latter is sufficiently electrically conductive for a second electrodeposition coating layer to be deposited on it electrophoretically from a second electrodeposition coating agent and likewise stoved (baked). Overcoating with further coating layers may then take place.

This invention further develops the coating process of the prior art for coating three-dimensional objects having surface regions that are visible and not visible to the observer and saves electrodeposition coating agent and simplifies the coating process.

### Benefits:

- Simplifies the coating process

### Applications:

- Coatings

### Contact: Ken Anderson

Director, Entrepreneurial & Small Business Support, Delaware Economic Development Office (DEDO)  
Carvel State Building, 820 French Street, Wilmington, DE, 19801  
Phone: (302) 577-8496, Fax: (302) 577-8499, Email: [Kenneth.R.Anderson@state.de.us](mailto:Kenneth.R.Anderson@state.de.us)